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EXAMINER

GOOD JOHNSON, MOTILEWA

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 09/26/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/754,167

Applicant(s)

SCHWUTTKE ET AL.

Examiner

Motilewa A. Good-Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-89 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-89 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to the following communications: Preliminary Amendment A, filed 01/30/2001.
2. Claims 1-89 are pending in this application. Claims 1, 29, 41, 56, 67, 76, 80 and 82-83 are independent claims.
3. The present title of this application is "Cyberspace Data Monitoring System" (as originally filed).

Drawings

4. Figures 1A-1D and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
5. The drawings were received on 03/26/2001. These drawings are unacceptable.

Claim Objections

6. Claim 84 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 83 cites "a display forming element . . . to be **on a common display** . . .", and claim 84 cites "further

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comprising a display . . . ", since the independent claim 84 cites a common display claim 84 is not further limiting in reciting further comprising a display.

7. Claim 86 is objected to because of the following informalities: Claim 86 recites "a method as in claim 83", however claim 83 is an apparatus claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 13-16, 88 and 89 recites the limitation "allowing objects" in pages 42-43 and page 61. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

11. Claims 1-89 are rejected under 35 U.S.C. 102(a) as being anticipated by Hussaini, "Simple Bar Graph Displays for Control Variables and Alarm Status", IEEE Electro/94 International. Conference Proceedings. Combined Volumes 10-12, May 1994, pages 651-656.

As per independent claim 1, a method, comprising: obtaining information indicative of a plurality of different parameters, said plurality of different parameters representing at least a plurality of different kinds of information, which information is referenced to different units of measure; (Hussaini discloses graphic displays and alarm messages for complex systems, page 651, col. 1) and displaying each of said plurality of different parameters on a common display, in a way such that only parameters among said plurality of said parameters representing each of said different kinds of information, which are an outside a predefined nominal range, are shown in a specified way. (Hussaini discloses display the data in various colored bar graphs, page 651, col. 1)

With respect to dependent claim 2, wherein said displaying comprises displaying towers indicative of values of the parameters, and said specified way includes towers which have other-than-nominal height, wherein parameters within said nominal range have nominal height. (Hussaini discloses displaying the graph in bar graph, i.e. tower, and the value range shown blinking, page 653)

With respect to dependent claim 3, wherein said displaying comprises arranging identification of a parameter along a first dimension, arranging categories of the parameters along a second dimension, and defining values indicative of comparison with said nominal range along a third dimension. (Hussaini discloses graphic displays, page 651, therefore making it inherent that the parameters would be indicated along a first, second and third dimension for 3-D and along a first and second dimension for a 2-D graphic display)

With respect to dependent claim 4, further comprising defining a nominal range for each of said plurality of parameters, and displaying said each of said plurality of parameters based on their relationship with said nominal range. (Hussaini discloses several sub ranges to indicate alarm status, page 651)

With respect to dependent claim 5, further comprising defining an alarm level for each of said plurality of parameters. (Hussaini discloses several sub ranges to indicate alarm status, page 651)

With respect to dependent claim 6, further comprising displaying a common alarm grid representing alarm levels for each of said plurality of parameters, and wherein each of said parameters which is outside said nominal range is displayed according to its relationship with said common alarm grid. (Hussaini discloses in figure 9, range indicator bar graph)

With respect to dependent claim 7, further comprising allowing the user to rearrange positions of display of various parameters. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claims 8-10, wherein said alarm level is a warning level; critical level; limit alarm . . . outside a specified limit. (Hussaini discloses indicating alarm status ranges, page 652)

With respect to dependent claim 11, wherein said alarm limit comprises a range with a lower value and an upper value. (Hussaini discloses an under flow and over flow conditions, page 653)

With respect to dependent claim 12, wherein said alarm limit is a trend alarm which is based on a rate of change of a parameter, and indicates that a trend of a value of the parameter suggests that an alarm will occur in the future, prior to the alarm actually occurring. (Hussaini discloses dynamic graphic displays which show relative change, direction of change, rate of change, frequency of change, etc., page 651 and further discloses range indicator having a pre-alarm an approaching condition, page 655)

With respect to dependent claim 13, further comprising allowing objects in an alarm state to be moved to a special alarm category on said common display. (Hussaini discloses the bar graphs are dynamic and programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 14, wherein said displaying comprises stopping said displaying objects in the specified way when they are moved to the alarm category, such that all objects in the alarm category as displayed in the same way as other objects are displayed in other categories, when said other objects are not in the alarm state. (Hussaini discloses a level indicator/ alarm status bar graph which indicates the alarm status according to its value in the alarm status ranges, page 653)

With respect to dependent claim 15, wherein said displaying comprises displaying objects having a height indicative of values of said parameters, and wherein said objects in the alarm category are displayed with zero height. (Hussaini discloses a center +/- error bar graph with displacement respective to a center or zero value, page 654)

With respect to dependent claim 16, wherein said objects are displayed with a height indicative of a percentage by which the parameter exceeds said nominal range and approaches said alarm level. (Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 17, further comprising displaying a color associated with a value of the parameter. (Hussaini discloses color-coding for the bar graph elements, page 653)

With respect to dependent claim 18, further comprising monitoring a continual increase or decrease in a value of the parameter over a specified interval to establish said trend alarm. (Hussaini discloses monitoring bar graph lengths for experimental data trend, page 652)

With respect to dependent claim 19, further comprising defining conditions, which establish a trend alarm, and monitoring said parameters for said conditions. (Hussaini discloses graphic displays for showing the dynamic characteristics such as rate of change, direction of change, relative change, frequency of change, etc., page 651)

With respect to dependent claim 20, further comprising monitoring a rate of change of a parameter over a specified period of time to establish said trend alarm. (Hussaini discloses the bar graph and useful for showing a rate of change, page 651)

With respect to dependent claim 21, wherein said trend alarm includes a warning trend alarm and a critical level trend alarm. (Hussaini discloses monitoring bar graph lengths for experimental data trend, page 652, and further discloses graphic display

alarm messages for complex systems, page 651, therefore making it inherent to include alarm status on trend data)

With respect to dependent claim 22, further comprising allowing actuation of a detail screen for a specified parameter, by allowing the user to click on a representation of the parameter using a graphical user interface. (Hussaini discloses bar graphs for use or process operators, page 652)

With respect to dependent claim 23, wherein said detail screen is on a pop up window. (Hussaini discloses locating the process on a central position may not be convenient but using effective displays for quick reading and timely operator response and further discloses blinking parameters, therefore making it inherent to not only use blinking parameters but also a pop up window, page 651)

With respect to dependent claim 24, further comprising also displaying information on other similar parameters in said detail screen. (Hussaini discloses in figure 4)

With respect to dependent claim 25, wherein said other similar parameters comprise other parameters having a same parameter category as a selected parameter. (Hussaini discloses in figure 6)

With respect to dependent claim 26, wherein said detail screen includes numbers representing values of the parameters. (Hussaini discloses in figure 2)

With respect to dependent claim 27, further comprising enabling an operation, which suppresses alarm notification for a specified time interval. (Hussaini discloses a

blinking element and color of each graph, which can be programmed to a color and also blink on and off for a set time, page 653)

With respect to dependent claim 28, further comprising storing historical data files indicative of parameter values, and using said historical data files to establish a trend alarm. (Hussaini discloses experimental data collected to show data trends for an idea bar graph, page 652)

As per independent claim 29, a method comprising: obtaining information indicative of a plurality of different parameters collectively representing a plurality of different kinds of information, which different parameters have absolute values representing at least a plurality of different measurement units; (Hussaini discloses graphic displays and alarm messages in complex systems in scales and unit of measure for process operators may be displayed, page 652) displaying information about values of said parameters on a common graph such that only parameters which differ from a specified nominal range are displayed in a prominent way, and parameters which are within said nominal range are displayed in a non prominent way; (Hussaini discloses level indicator/alarm status bar graph in which the current level is displayed as well as the alarm status according to its value in the alarm status range, page 653) and allowing selection of parameters, which are displayed in said prominent way, and changing said parameters to be changed to being displayed in said non-prominent way. (Hussaini discloses displaying bar graphs in a underflow and over flow conditions, center error bar graph, level bar graph with status at top element, range indicator bar graph, clock bar graph, bi-level bar graph, etc., pages 653-655)

With respect to dependent claim 30, wherein said selection comprises moving said parameters displayed in said prominent way to a special section for parameters which are each outside said specified nominal range, and in which section all parameters are displayed in said non prominent way. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 31, wherein said selection comprises allowing reset of a parameter value, to display said parameter value in said non prominent way even when said parameter value is outside said nominal range, said reset continuing for a specified time. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 32, wherein said selection comprises selection of parameters, which are outside said nominal range. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 33, wherein said selection of parameters comprises selection of parameters, which are in an alarm state. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 34, further comprising defining an alarm group, having a plurality of parameters therein, each of which are in alarm, but are displayed in

said non prominent way, and said allowing selection comprises allowing the user to move said parameters to said alarm group. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 35, wherein said parameters are displayed as items with variable height, a nominal height representing a parameter that is within said nominal range, and heights other than said nominal height representing parameters outside said nominal range. (Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 36, further comprising defining an alarm level for each of said parameters, and wherein a height of said parameter that is outside said nominal range is related to a percentage by which said parameter value exceeds said nominal range and approaches said alarm level. . (Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 37, further comprising displaying a common alarm grid, at a height representing said alarm level, and wherein each of said plurality of parameters reaches said alarm level at an individual value which is individual for said parameter. (Hussaini discloses indicating alarm status ranges, page 652)

With respect to dependent claim 38, wherein said alarm level is a warning level or critical level or a trend alarm. (Hussaini discloses several sub ranges to indicate alarm status, page 651)

With respect to dependent claim 39, further comprising defining at least one trend alarm, which indicates the trend of the value of the parameter suggests that an alarm will occur prior to the alarm actually occurring. Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 40, further comprising monitoring a rate of change of a parameter over a specified period, determining if said rate of change of said parameter and said specified period exceeds a specified value, and establishing a trend alarm when said rate of change of said parameter and said specified period meets said specified criteria. (Hussaini discloses dynamic graphic displays which show relative change, direction of change, rate of change, frequency of change, etc., page 651 and further discloses range indicator having a pre-alarm an approaching condition, page 655)

As per independent claims 41, 56, 67, 76, 80 and 82, they are rejected based upon similar rational as above independent claim 1.

With respect to dependent claims 42-55, 57-66, 68-75, 77-79 and 81, see above rejection for dependent claim 2-28 and 30-40.

As per independent claim 83, an apparatus, comprising: a processing element . . . and a display forming element . . . and dependent claims 84, 85, and 87-89, they are rejected based upon similar rational as above independent claim 1 and dependent claims 2, 5, 22 and 14 respectively.

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With respect to dependent claim 86, further comprising a memory, storing a nominal range for each of said plurality of parameters, and wherein said display forming element displaying said each of said plurality of parameters based on their relationship with said nominal range. (Hussaini discloses the graph types can be implemented with software for computer graphic displays and enhance their performance, therefore making it inherent that the data is stored, page 656)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is (703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


Motilewa A. Good-Johnson
Examiner
Art Unit 2672

mgj
September 16, 2003